

# VIBRATIONS

**NEWSLETTER OF COLORADO SERVICES FOR CHILDREN AND YOUTH WITH  
COMBINED VISION AND HEARING LOSS PROJECT**

**Serving Children with Combined Vision and Hearing Loss (Deafblindness),  
Their Families, and Service Providers**

**Modified Winter 2008 Edition: Focus on Movement and Active Learning**

*This is an edited version of the original newsletter. Only articles pertinent to movement and active learning have been retained as resource information. If you copy of any of the content of this modified newsletter, please credit the original source.*

## MOVING ALONG

By Tanni Anthony



Movement defines our lives. We move when we breathe, speak, look, direct a hand to reach something, or ambulate to a new location, even if it is just turning over in bed. As we respond to the objects and people within our lives, we respond with movement. For many able-bodied people, our daily movements do not even register as movement effort. That is, until we challenge ourselves by cross country skiing all afternoon, a summer hike, or the climb up the many stairs of a beloved monument. For others, simple movement come at the price of physical exhaustion and/or confusion as to how to move one's body. Our role with these learners is to create an environment that supports and reinforces movement.

As we work with children and youth who have movement challenges, it is helpful to view the world from their perspective. If movement takes supreme effort, what is the reward of this effort? Is it a special person, a favorite toy, book, musical item, or time with friends? We are more willing to move when we have a good reward. I remember the days before TV remote controls when I fought with my siblings over who would GET UP off the couch and turn the television show that I was waiting to see (even when it was the show they also wanted to see). My motivation (and lack of strategy) always got me off the couch and to the television knob. When we have a reason to move and especially a highly-desired purpose, we have incentive to move. I won't bore you about my jogging routine in college...to of all places, the Dairy Queen! (we walked back to campus)

The edition is dedicated to creating environments with equipment, expectations, pacing, and motivational rewards for our children who may need a little more encouragement to move. We hope this is helpful information for you that you will be able to put INTO ACTION! Please be in touch with your needs for more information or assistance.

# Resonance Boards

By David Brown  
California Deaf-blind Services

*Editor's Note: David Brown is an Educations Specialist with the California Deaf-Blind Project. He was our Summer Institute Guest Presenter in August, 2007. This article is one of the handouts that he provided for the training. We thank David for his time with us in Colorado. He is a dedicated, passionate, and very knowledgeable teacher and we all benefitted from his expertise.*



The idea of using hollow resonating boxes or platforms to help deaf people perceive sounds as vibrations has been known for centuries (Lane, 1984). You may have seen teachers in programs for deaf students stamp their feet on wooden classroom floors to get the students' attention. One of the leading classical musicians in the UK, Evelyn Glennie, is a percussionist who is profoundly deaf and partly "feels" the music through the wooden platforms on which she stands to perform (The Evelyn Glennie Home page). This idea was introduced into the world of visual impairment and blindness as well when Lilli Nielsen began to promote the use of resonance boards by children who had visual impairments and additional difficulties (Nielsen, 1972).

Then, in the later 1980s, people involved with children who are deaf-blind took up the idea, and it is now possible to find these simple but useful pieces of equipment in all kinds of programs and in homes (Johnson, Griffin-Shirley, & Koenig, 2000). Every baby and infant should have access to a resonance board as part of their collections of toys and equipment since these boards offer great and exciting opportunities.

## How Do You Make a Resonance Board?

There is a scope for creativity and variety in making a board, but the basic design is simple and requires only rudimentary skills in carpentry. To make a board, you will need the following materials:

- \* A square piece of plywood at least 1/8 of an inch thick. The thickness may vary depending upon who is going to be getting on the board. Remember that if the board is too thin it will split when an adult kneels on it, and if it is too thick, it will not resonate very well. I suggest that you stand in a timber shop and hold sheets of plywood of various thickness vertically on the floor, then place your ear and the side of your head against them as you tap and scratch at each one to see what you think. A good size is 4 feet square, but this can be enlarged or reduced, again depending upon who is going to be using it. Too small a square and the resonant qualities will reduce dramatically; too large a square and the center of the board will lift and touch the floor when a person's weight is on it, seriously dampening the resonance. If the board is much bigger than 5 feet square then only tall, strong people will be able to lift and move it. I generally use 3 feet square boards for babies and infants, and 4 feet square boards for older children. As children with limited movement grow and get taller, I place them more diagonally on the board.
- \* Four strips of 1 inch x 1 inch wood to be attached to the underside rim of the sheet of plywood (for example, on a 4 feet square board each of these strips would need to be 3 feet 11 inches long). These can be glued around the underside rim, but if the board is likely to get a lot of use and a lot

of lifting and moving around (in a school classroom rather than a home), use glue plus nails or screws, taking care to countersink the nails or screws into the surface of the plywood for safety. Some people are concerned that using nails or screws deadens the resonant quality of the board, but I have found this to be so slight it seems negligible.

\* One can of furniture wax and a polishing cloth.

## **How Do you Finish and Maintain the Board?**

Once the board is constructed, the upper surface and edges need to be made very smooth and safe by rubbing with sandpaper and then glass paper. The final step is to apply two coats of furniture wax with a polishing cloth (hard work!) so that the finished surface is smooth, rather waterproof, and easy to wipe clean. You might like the idea of using scented wax polish (such as lavender) to add a consistent smell as an extra marker to identify the board. When I made my first board in 1985, I painted it black for good visual contrast and for saliva proofing. It was a beautiful job with undercoat and two coats of black gloss paint, but I found that these layers of painted deadened the resonant qualities of the board very significantly. Painting the board with clear varnish does the same, so it is best to stick to wax polish.

Maintenance needs depend upon the amount of intensity of use that the board gets. The board I used for years got a lot of use and so needed to be rubbed down with glass paper and rewaxed two or three times every year. If you see parts of the plywood surface losing their sheen or bits of frayed wood or splinters you urgently need to make repairs, at least to rewax with the polishing cloth until you have time to glass paper it smooth again. To save storage space, it is best to keep the board upright against a wall (maybe behind a cupboard or a sofa), with the smooth surface towards the wall for protection.

## **What Can You Use on the Board?**

Toys and equipment to be used on the board depend entirely upon availability, safety considerations, and personal preferences (yours and the child's!) I recommend access to a variety of things that includes plastic and enamel plates and bowls, metal chains of various lengths and weights (such as dog choker collars), bunches of metal spoons or keys, rocking toys with bells inside (such as Chime Bird and Happy Apple), plastic or metal slinkies, spinning tops, metal cans of all sorts, music boxes, drumsticks, large round pebbles, and vibrating and wind-up objects. Since my arrival in California from England in 2000, colleagues at the Blind Babies Foundation have introduced me to the idea of using more natural materials like pieces of smooth driftwood and piles of walnuts and pecans (still in the shell, of course!). My favorite object to use on the board is myself. I like to knock and scratch on the board or talk and sing at it as a way of making contact with the child who is on it.

## **How Do You Start Using the Board?**

A child can be placed alone on the board or can use it with another child or with an adult in any safe, desired or useful position. Standing and walking on the board barefoot can be fun, as well as sitting and lying down. Some children might enjoy being in their seat or standing frame on the board. For first-timers in the horizontal position the board can be a scary place in the beginning, so I often recommend spreading a towel over the board, so that it acts as a muffler to sounds and vibrations. The towel can be repositioned gradually as the child gets used to the sound and vibro-tactile qualities of the board, so that first bare feet touch the board, then the legs, then the butt, the torso and shoulders, and finally, if the child is happy and interested, you can remove the towel completely and expose the head to the bare wood. Some of the children may need days or weeks for this process, but others cope with it over the space of half an hour or so. Another idea is to begin with the child lying on the carpet with only his or her feet on the board. If sensitive feet are a problem you might want to

reverse this position or just leave the child's shoes or socks on. You can place the board on carpet to minimize the resonance or move it to a hard floor surface like linoleum, tiles, or concrete to produce much more dramatic feedback. Sometimes a child on a chair, or in a wheelchair, or standing might like to interact with the board held vertically next to them.

## **What Do You Do with the Board?**

This is where all that hard work pays off and things get exciting! Use your imagination and the sky is the limit! You can work on an amazing range and variety of skills and activities using a board, including math, communication, large motor skills and mobility, fine motor manipulation, use of vision and hearing, tactile and visual search, turn-taking, anticipation, encouraging vocalizations and speech, problem-solving, sequencing, cause and effect, rhythm, and on and on. The special quality of the board is that any movement on its surface will produce amplified sound and matching vibration, and it will vibrate to music or voices aimed at it even if the sound-maker is not in direct contact with the wood. For children with deaf-blindness the amplified sound coming through the board might be important, but the vibration that accompanies the sounds will have an immense impact if the child is in direct contact with the board's surface, and this might be very motivating for them. Sometimes using a board's surface, and this might be very motivating for them. Sometimes using a board can produce very interesting and surprising outcomes:

- \* A distractible and very active child who moves around the room a lot may choose to remain on the board because it is the place where all the interesting feedback happens, yet a very passive immobile child may become more active on the board because of the feedback it provides, and also because it has a smooth surface that reduces friction and makes sliding, bottom-shuffling, and back-scooting easier.
- \* A child with a poorly coordinated movements might move less but move with more care and planning in order to produce specific feedback from the board, yet a passive and inactive child might be encouraged to move more because each arm or leg movement or turn of the head produces interesting feedback when he or she knocks the rocking toy, drags the metal chains draped across wrists or ankles, or just taps and kicks the board directly.
- \* A very vocal child might be silent on the board in order to listen and attend, but a normally very silent child may vocalize in response to sounds and vibrations coming through the board.
- \* A child who does not normally use vision may look to see what is tapping or rocking on the board or may use vision to guide arm or leg movements to produce interesting feedback again.
- \* A child who dislikes using his or her hands to touch things might reach out to make sounds and vibrations happen again.
- \* Children who do not normally interact with other people in positive ways may attend, wait, look, touch, and take turns during tapping games on the board. Interactions with peers might be encouraged if children spend time together on the board. I have also observed in regular classrooms, a board raised up onto a large table with the whole class sitting around it and playing games involving turn-taking, or creating or accompanying music, or banging and chanting as part of a storytelling or drama session. Used in this way, the board is an effective agent for including all the children in the class activity (Park, 2000).

- \* By traveling around the board in some way a child might discover the board's edges and use touch or vision to explore them, thus expanding their understanding of space and boundaries.
- \* A child with a poor sense of space and direction may be helped by tapping games on the board, since the vibrations through the wood will provide extra information about where the taps are coming from and where the other person is located.
- \* Sometimes a child might decided, or be encouraged to decide, to get himself on or off the board, and this can provide interesting challenges to problem-solving activities.

As you can see from this list, many of the things that the board can encourage are often thought of as being in the areas of expertise of the physical therapist, the vision specialist (teacher), the orientation and mobility specialist, and the teacher of the deaf. If you have a board, any of these professionals can be brought in to explore it, to experiment with it, and to collaborate in developing ideas to help individual children. There are also other pieces of equipment designed or promoted by Lilli Nielsen (Nielsen, 1992; Johnson, Griffin-Shirley, & Koenig, 2000) that can be used with a resonance board. Above all, let the children you know show you how to use the board, and let your imaginations and creative impulses run free together. Discovering these boards almost twenty years ago change my life in the most positive ways, and I hope the discovery changes yours life too.

### References

The Evelyn Glennie Home Page. <http://www.evelyn.co.uk/script.htm>

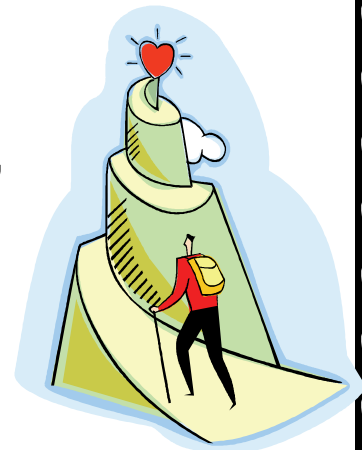
Johnson, K., Griffin-Shirley, N., & Koenig, A. J. (2000). Active learning for Children with Visual Impairments and Additional Disabilities. *Journal of Visual Impairment and Blindness*, 94(9), 584-594.

Lane, H. L. (1984). *When the Mind Hears: A History of the Deaf*. New York: First Vintage Books.

Park, K. (2000). The Resonance Board. *The SLD Experience*, 26, 24-26.

“One step at a time is good walking.”

Chinese Proverb



# An Introduction to Dr. Lilli Nielsen's Active Learning

by Stacy Shafer, Early Childhood Specialist, TSBVI Visually Impaired Outreach

*This article was retrieved from the Texas School for the Blind/Visually Impaired website: <http://www.tsbvi.edu/Outreach/seehear/fall03/lilli.htm> There have been some slight adaptations .*

Dr. Lilli Nielsen has worked as special education adviser at Refsnaesskolen, National Institute to Blind and Partially Sighted Children and Youth in Denmark since 1967. She was trained as a pre-school teacher and psychologist. She has performed research in the area of spatial relations with infants who are congenitally blind and has written several books and articles about educating children with visual impairments and multiple disabilities. Dr. Nielsen's approach is called Active Learning.

All young children learn through play. They need to be encouraged to explore their environment and objects in their environment. Dr. Nielsen believes that all very young children learn by being active, rather than passive recipients of stimulation. We need to observe typical children to see how they learn to move their own bodies (raising their heads, reaching for objects, sitting up, etc.); use their bodies to explore their surroundings (including any and all objects within their surroundings); and actively participate in interactions with other people. A visual impairment prohibits a child from having enough opportunities to develop these abilities and have these experiences without intervention. She encourages the adults to set up the child's environment so that he can do this. Dr. Nielsen's recommendations when developing the child's environment.

**Observe the child.** It is imperative that we know what the child can do, what activities he enjoys, what type of objects he like, etc. Assessing the child's existing skills and preferences is the first step in programming. Observation will help you note the current developmental skills the child has. A child's preferences are indicators of the underlying strengths of his system. These preferences can guide you in the selection of objects and activities. You need to know a child's repertoire so you can notice change and improvement.

**Provide the child with more activities and objects that are similar to those he enjoys.** This will encourage the child to explore and experience new things and broaden his knowledge base. Young children with visual impairments need to be encouraged to explore not only toys from the toy store, but also everyday objects around the house.

**Give the child opportunities to practice and/or to compare.** As adults, we are often tempted to remove materials as soon as the child shows that she can use them. We all relate new information to things we already know. For example: The first time you successfully drove a car around the block, you still needed lots more experiences driving in different environments, on different types of roads and highways, different vehicles, different times of the day and night, in different types of traffic, with the radio on and off, and with friends in the car, before you really mastered all the skills and concepts about driving. When a child begins to bang one object on another one, she needs to be given the opportunity to bang lots of different objects on lots of different surfaces. (The sound produced when banging a metal spoon on the couch is much different than banging it on the coffee table or a metal mixing bowl.) Children need to be able to repeat an action many, many times, in order to learn.

**Provide a few materials and activities that are at a slightly higher developmental level to provide a challenge for the child, so he doesn't become bored.** When you present information to the child, you only model how to use the objects or complete the activities. You do not expect him to imitate what you do until he imitates of his own accord.

**Do not interrupt a child by talking when she is actively engaged in play.** Most of us have had the experience of talking to an infant who is busily kicking her legs and having the child stop kicking to listen to our voice. When a child is exploring or playing with an object or practicing a new movement, don't interrupt with a comment. We need to wait to talk with the child about what she was doing until she turns to us to share her experience, or at least until she takes a little break in the activity. This does not mean that we need to stop talking to our young children with visual impairments, just that we need to pick our moments.

**Slow down, when interacting with a child.** We must be willing to wait and give the child time to take a turn in the interaction. When playing with a child, Dr. Nielsen tells us to give the child time to explore an object alone, rather than jumping in and showing her/him how to use it. At a conference, during a child demonstration, Dr. Nielsen offered a battery operated facial brush to a child. She let him explore the brush in his own way. He held the brush against various body parts, moved it from hand to hand, turned it over, put it on a tray, moved it against other objects on the tray, picked it back up, put it to his lips, and did many other things with it. Then he turned to Dr. Nielsen to share the experience. That was the moment she talked with him about the facial brush and the things he had done while playing with it.

**Let the child have control of her/his own hands.** Dr. Nielsen feels it is important when we are interacting with a child who has a visual impairment, that we not take her/his hand and bring it to the materials. Instead, we need to develop alternate strategies for presenting objects to the child (e.g., gently touching the toy to the child's arm or leg to alert him of the object's presence, making noise with the object to arouse his curiosity to encourage him to reach out, placing several objects so that they are touching the child's body or very close to it so any movements he might make will bring his body in contact with an object).

Dr. Nielsen has developed several pieces of equipment to provide children with visual impairments the opportunities to actively participate with their environment. One of these "special environments" is the Little Room. The Little Room consists of a metal frame supporting three side panels and a Plexiglas ceiling from which a variety of objects are suspended which the child finds interesting and enjoyable. This gives the child the opportunity to experience the properties of objects, to compare different objects, and try out different things to do with the object on his own without adults interpreting that experience for him. Since the objects are stable, it allows the child to repeat his actions with an object as many times as he needs to, at one to two second intervals, without dropping and losing it. The immediate repetition enables the child to store the information gained from the experiences in his memory.

## **References:**

- Nielsen, Lilli. "Environmental intervention for visually impaired preschool children with additional disabilities," *VIP Newsletter*, Vol. 8, No. 3.
- Nielsen, Lilli. "The blind child's ability to listen," *VIP Newsletter*, Vol. 10, No. 3.
- Nielsen, Lilli. "Active learning," *VIP Newsletter*, Vol. 10, No. 1.
- Nielsen, Lilli. *Space and Self*, SIKON, 1992.
- Nielsen, Lilli. *Early Learning Step by Step*, SIKON, 1993.
- Nielsen, Lilli. *Are You Blind?*, SIKON, 1990.
- Unpublished notes taken from lectures given by Dr. Lilli Nielsen at conferences in Albuquerque, New Mexico, September of 1992, in Milwaukee, Wisconsin in October 1993, and Dallas, Texas, in May 1994

## Active Learning and the Exploration of Real Objects

By Stacy Shafer, Early Childhood Specialist, and  
Ann Adkins, Education Specialist, TSBVI Visually Impaired Outreach

This article was retrieved from the Texas School for the Blind/Visually Impaired website: <http://www.tsbvi.edu/Outreach/seehear/winter04/active.htm>. There have been some slight adaptations to the article.

All children learn by exploring and manipulating the objects in their environment and by comparing new objects to familiar ones. They need as many experiences as possible with *real* objects and textures. Hands-on experiences with a variety of objects, made out of as many different materials as possible, allow students to work on a variety of skills and learn about their environment. Concrete experiences with real objects also facilitate concept development. It is important to give students ways to actively impact their environment and teach them to be active participants in their world instead of passive recipients of stimulation from adults. The active learning techniques developed by Dr. Lilli Nielsen provide excellent opportunities for visually impaired students to gather information through the exploration and manipulation of real objects. Dr. Nielsen's approach encourages children to be *active* learners, and helps them discover that they can control events in their lives.

### **Some of the active learning equipment and materials that we have observed include:**

**The Little Room:** The Little Room is described in detail in Dr. Nielsen's book, *Space and Self*. It is a piece of equipment that provides students with a safe environment for independent play and exploration. Many children are more willing to tactually explore objects when they are in control of an activity and can anticipate what might happen. The objects in the Little Room are attached with elastic and go back to their original positions when the child lets go of them, enabling him to find them again and repeat an action as quickly and as often as he wants. It gives students the opportunity to work on object exploration and manipulation, object comparison, object permanence, cause and effect, spatial concept development, problem solving, independent play, recognition, anticipation, sensory integration, and spatial memory. The Little Room also provides the opportunity to learn about the different materials from which objects are made (paper, leather, wood, metal, etc.) and the different attributes of objects (size, weight, temperature, etc.). As students experience these different objects and learn about their specific characteristics, they will discover that some objects are better for some activities than others. They will learn that some objects make better sounds when batted at than others, some are better for mouthing, some are more interesting to touch, etc. Although the Little Room is an independent activity, it **MUST** be supervised at all times.

**The Position Board:** This is a piece of pegboard to which objects are attached with pieces of elastic and is also described in *Space and Self*. It may be used as an independent activity if the position board is placed so it will remain stationary, or it may be used with an adult. It can be attached to a student's wheelchair tray, attached to a wall, or placed on the floor or table. Like the Little Room, objects should remain in the same position to encourage the development of object permanence, and the elastic attached to the objects needs to be long enough for students to be able to bring the objects to their mouths. Be sure to include objects with different weights and textures.

**The Scratching Board:** This is a piece of wood with different textures attached to it. These textured squares are approximately 3" X 3". Examples of textures to include are: leather, carpet, cork, shiny wrapping paper, packing "bubble" sheets (if there is not a danger of the student tearing off a piece and getting it in his mouth), corrugated paper from a box of chocolate candy, shiny ribbon, suede, etc. Fine screening, like tea strainers or cooking strainers, can also be used if the edges are covered to prevent injury.

The scratching board can be attached to a student's tray or positioned so that it can be used while the student is lying on the floor, with either his hands or feet. The Scratching Board can be stabilized so it is an independent activity.

**The Tipping Board:** This is a board that is fixed in an upright position. Hang objects from the top of the board so that students can receive sensory feedback by batting at them. Again, it can be positioned so that a student can use both his hands and feet. Some objects to consider using include: shiny bead necklaces, strings of interestingly shaped beads, chains (such as those used in the 70's as belts and necklaces), bells, a plastic or metal slinky, wooden spools strung on cord, etc. Inexpensive necklaces can be restrung with nylon fishing cord or dental floss to prevent breakage. The Tipping Board is an activity that students can do independently, with supervision, if the board is stabilized.

**Vest with Objects:** The Vest is like a cummerbund with Velcro. Objects and interesting textures are attached to it for students to explore independently. Headliner fabric may be used instead of Velcro to reduce the possibility of abrasions.

**The Resonance Board:** Playing on a resonance board can be a very rewarding activity for students, providing them with sensory input from the vibrations created by their play. Position the student on the resonance board with several interesting objects around him to encourage him to explore his immediate environment. Playing on the resonance board can be an independent activity, or it is an activity that could be shared with an adult or another student. The child should be on the Resonance Board when using a Little Room.

All of the activities described above encourage students to use their hands to explore their environments. Visually impaired students need repeated opportunities to tactually explore and examine real objects every day. They need a variety of experiences that require *active* responses. Additional information on active learning can be found in Dr. Nielsen's books, *Space and Self* and *Are You Blind?*. These books also include information on suggested objects to use with the activities.

The student's educational team should work together to choose appropriate objects. Objects should be pleasurable, graspable, and have tactile, auditory, and visual qualities. Real objects from everyday experiences and daily activities are recommended because they can provide more meaningful and rewarding experiences than toys. Toys and commercially available objects are often made of plastic, and plastic provides little information that is tactually meaningful for visually impaired students. Objects should also be presented in such quantities that the child will have the opportunity to choose, compare, and play counting and sequencing games. They should also vary in weight and texture. Caution is advised because some objects are not appropriate for use with all students. Teams should ensure that all materials and boards used in active learning activities are splinter free, that rough edges are covered with heavy layers of masking or packing tape (especially pegboard), and that any paint, acrylic, or finishing agents used are nontoxic. Even though these are independent activities, they **MUST** be supervised at ALL times.

## References

Nielsen, Lilli. *Space and Self*, SIKON, 1992.

Nielsen, Lilli. *Are You Blind?*, SIKON, 1990



# Understanding *Every Move Counts, Clicks and Chats (emc<sup>3</sup>)*

By Gina Quintana

*This article was written from notes taken at a lecture by Jane Korsten, author of Every Move Counts.*

The other night I was watching a new show called Oprah's Big Give. This particular week, the show was filmed in Denver. My first thought was "Why didn't I know about this?" but I watched the show and really enjoyed seeing how the contestants went about "finding someone to help." One of the contestants came across a family who had a child with severe disabilities and "did not communicate." As this story progressed, the contestant decided to help this family whose child, now a young lady, is someone I had the honor of meeting several years ago. I was a little disturbed when I heard the contestant on the show announce that she was going to raise money to help buy this young lady a communication device so that she could begin "communicating with her family." My educator's brain went right to a list of questions:

- What does type of functional communication system does she have in place right now?
- What is her vision?
- What is her hearing?
- What are her sensory, physical, and other learning needs?
- Has an Assistive Technology Evaluation been completed to determine that a device is appropriate at this time?

Many of these questions were fresh in my mind, because I had just attended a training called "Every Move Counts, Clicks and Chats," (emc<sup>3</sup>) A Sensory-Based Approach: Communication and Technology. The training was provided by Jane Edgar Korsten, a Speech Language Pathologist who researched and co-authored this assessment and manual with Terry Vernon Foss and Lisa Mayer Berry (OTR/L).

*Every Move Counts* (EMC) is an assessment that I had used and was quite excited to see it updated. It is a process that "addressed the needs of individuals, regardless of age, who were perceived as having 'severe and profound sensorimotor differences'." The assessment is divided into 3 main areas. There is the *Counts* section and the focus is (a) communication assessment, (b) symbol assessment; and (c) the assessment summary. The next section is *Clicks* which is purposeful switch use assessment. The final section which is titled *Chats*, which is the portion to be used when assessing what voice output device components will be needed.

There are many people (children and adults) who because of their "communicative, sensory, and/or motor differences are non-speaking." (Note: non-speaking is very different from non-communicating.) Many times there is an assumption of "lack of cognition" and "behavior problems" because of the lack of a functional communication system. Without a functional communication system, other skill areas are hindered.

According to Korsten, it is important to have an understanding of the difference between communication and language. Many times these terms are used synonymously, when in fact they are not.

"...**communication** is a 'process through which we exchange information,' and **language** as 'the structure through which we communicate.' In other words, **communication** is the message (for example, "thirst"), and **language** is the method by which we communicate the message (for example, by pointing to a cup)" (p.9).

She also goes on to say that there are prerequisite behaviors or skills for **language and communication**. For language, according to Musselwhite & St. Louis (1982):

- *Eliminating interfering behaviors*
- *Improving attending skills*
- *Developing eye contact*
- *Developing functional object use*
- *Establishing object permanence*
- *Developing functional object use*
- *Establishing object permanence*
- *Teaching motor imitation*



For communication skills that precede language, according to Sternberg (1980), individuals must:

- *Be able to separate one's self from the environment.*
- *Understand that there is something they can do to exchange information with someone. (mode)*
- *Understand that there are things about which to communicate. (topic)*
- *Understand that there are people with whom to communicate. (partner)*

Other factors that are described in the book are the importance of looking at several areas when completing this assessment. It is important that we look at development and developmental differences. Other sensory areas that need to be addressed are visual, auditory, olfactory, gustatory, tactile, vestibular and proprioceptive.

The *Every Move Counts* assessment is communication based, as opposed to language based. It really takes a look at and identifies abilities (communication and motor) rather than disabilities. It really helps the team develop individualized goals that are appropriate and achievable by the individual. As best said by Korsten, "Assessment is just a starting point... not a universe." (p. 56) This is a great book, check it out for your assessment needs.

Korsten, J.E., Vernon Foss, Terry, and Mayer Berry, Lisa, (2007), *Every Move Counts Clicks and Chats, Sensory-Based Approach: communication and Assistive Technology*, EMC Inc.

The Colorado Services for Children with Combined Vision and Hearing Loss Project is part of the Colorado Department of Education. This project is supported by Grant #H326C030022 from the U.S. Department of Education. This newsletter was produced and distributed pursuant to the grant. Points of view do not necessarily represent CDE positions or policies. Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government. The newsletter is published three times a year. Requests to be placed on the mailing list should be mailed to Gina Quintana, CDE, 201 East Colfax Avenue, Denver, CO 80203. This newsletter was prepared by Tanni Anthony and Gina Quintana.

